

Is the boom really over?



David Denham

Email: denham@webone.com.au

Australian resource industries are in good shape, despite Minister Ferguson's remarks about the boom in commodity prices being over. Those listed on the ASX are performing much better than those in other sectors; there is going to be a continued and increasing demand for mineral and petroleum resources as the world population grows and the standards of living increase; and Australia is investing in the future with vigorous exploration programs. There may be hiccups on the way but in the medium to long term the future looks good.

Background

The media love disasters and bad news because they think these sell newspapers, boost television ratings and make many of the viewers and readers feel safe and comfortable at home away from all the turmoil. So after Martin Ferguson the Minister for Resources and Energy said (23 August 2012), in response to BHP Billiton's decision to delay the expansion of Roxby Downs that 'The boom in commodity prices is over' there has been considerable debate about the well-being of the Australian resource industry.

I do not believe it is sound to assess the health of our industry on one decision made by BHP Billiton approximately 1 month ago. Rather, we should examine the trends over the past few years because the exploration, discovery/development timeframe is a lot longer than 1 month. And in any case, there is always variability in prices and demand.

My aim is to examine four factors that play important roles in assessing the health of the sector, and to draw some conclusions based on this evidence. These factors are:

- the value of the market capital of Australian resource companies listed on the ASX
- the annual global production rates of coal, gold, iron ore and oil (this is a proxy for demand)
- the price of these four commodities
- the exploration investment in Australia for these commodities.

Market capitalisation

The total market capitalisation of resource companies listed on the ASX provides one measure of the health of the industry. Figure 1 shows how this factor has changed over the past 12 years. The total is the sum of the market capital of all the resource companies listed in the top 150 companies in the ASX.

The numbers have been normalised using the CPI published by the Australian Bureau of Statistics in the September quarter 2012. The numbers for BHP Billiton and Rio Tinto have also been plotted.

I make three observations on this data set:

1. Before the GFC, the peak of the AllOrds (June 2007) was 12 months in advance of the resource company peak (June 2008). After the GFC the two curves follow similar timelines. The reason for this is not evident.
2. There has been an overall decline in value of both the AllOrds and the 'Totals' since the peaks in 2007–08.
3. The value of the AllOrds in September 2012 is almost the same as it was in July 2000, whereas the resource market capital has more than doubled its value in the same period.

In summary, the resource companies in the ASX's top 150 companies are in comparatively good shape, particularly as several overseas takeovers in the last 12 years have reduced the number of companies registered on the ASX.

Production/demand

Global production/demand is crucial because if there is no demand then there will be a problem for the resource industries. I am using production as a proxy for demand, because although there may be temporary gluts of production these will eventually even out. Figure 2 shows global production for coal, gold, iron ore and petroleum from 1960 through 2011. These are arguably the four most important commodities for Australia in an economic context. It is clear that the production rates for coal

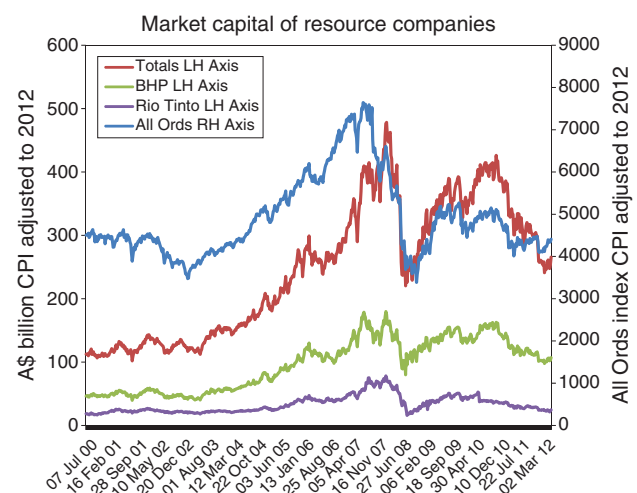


Fig. 1. The AllOrds index and total market capital of resource companies listed in the top 150 companies on the ASX, adjusted to September 2012 A\$. BHP Billiton and Rio Tinto vales are also plotted.

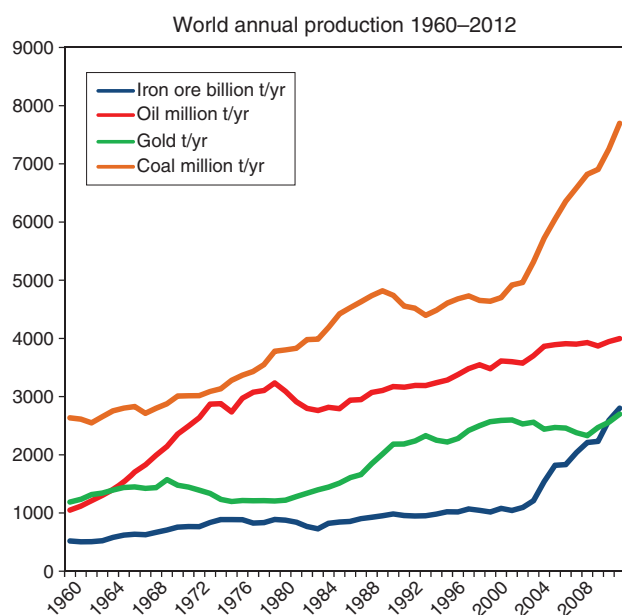


Fig. 2. Annual world production of coal, gold, iron ore and oil for 1960 through 2011. Note that the production rates for coal and iron ore are all increasing significantly. Gold and oil are only increasing gradually because they are close to peak production levels.

and iron ore have all increased significantly in recent years. Gold and oil are only increasing gradually because they are probably close to peak production rates; they are just getting harder to find and extract – there is certainly no decline in demand.

Consequently, even if global demand levels off and production rates fall, production levels will still be well above the levels of 10 years ago and consequently there should be enough demand to maintain a strong industry.

The price of the commodities

Of all the factors impacting on the well-being of Australian resource industries, price is probably the most important. Figures 3 and 4 show the prices for aluminium, coal, copper, gold, iron

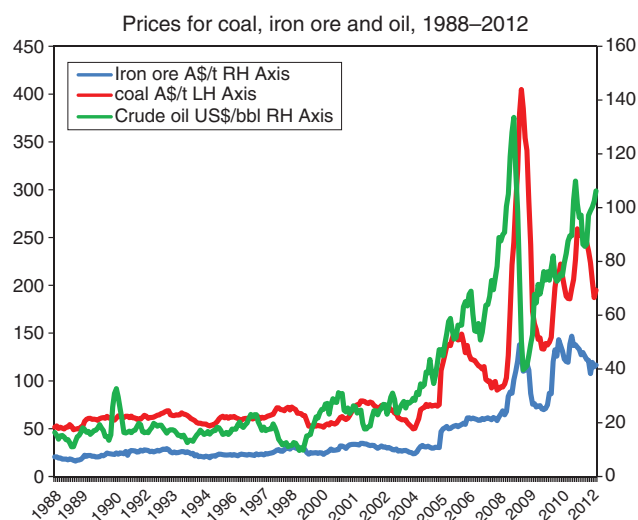


Fig. 3. Price for coal, oil and iron ore for the period 1988–2012. Notice how there has been a significant increase in the price of all three commodities since 2004 and also the huge short-term variability in the data sets. No CPI correction has been applied.

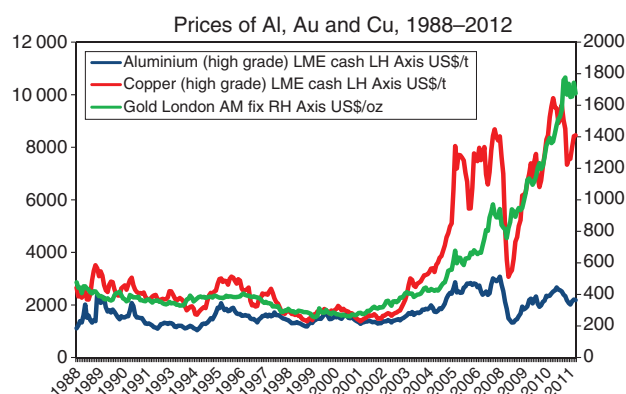


Fig. 4. Price for aluminium, copper and gold for the period 1988–2012. Notice how the price of gold has increased steadily since 2000. The copper price shows a high variability and the aluminium price reflects only a gradual increase. No CPI correction has been applied.

ore and oil from 1988–2012. Notice how there has been a significant increase in the price of all commodities since 2004 apart from aluminium. These data sets show large short-term fluctuations, which lead to difficulties in forward planning for new developments. However, since 2004 the long-term trend has been upwards; and provided there is not some sort of catastrophic collapse, the future looks sound as long as it is assessed over a ‘several-year’ time window. Price spikes such as those that occurred in 2008 before the GFC can give an over optimistic view of what to expect in the future and care should be taken if these are factored into future financial planning.

As long as the global population continues to grow and the BRIC countries continue to expand there should be an increasing demand for mineral and petroleum resources.

Exploration investment in Australia

Another critical factor is the level of investment in new resources. In other words, how much is being spent on mineral and petroleum exploration. As deposits become harder to find it is important that effective long-term exploration programs are

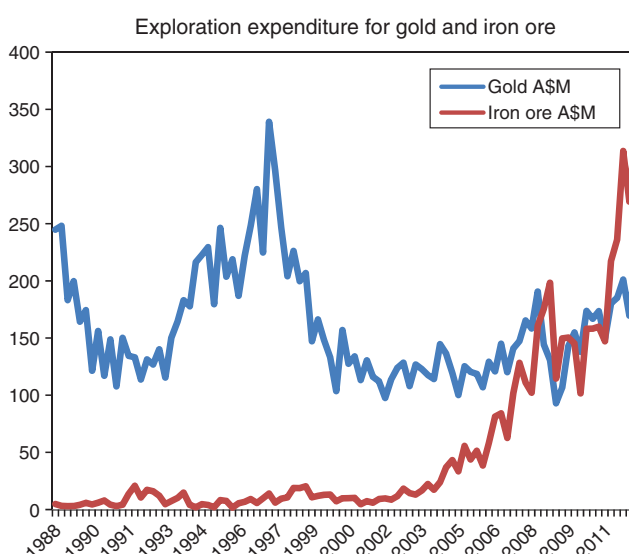


Fig. 5. Quarterly exploration investment for iron ore and gold in Australia 1988–2012. Adjusted to September 2012 A\$.

carried out. The time between discovery and resource extraction is of the order of 10 years, so there must be long-term exploration programs. BHP's Roxby Downs situation is a good example. The company has spent millions of dollars proving-up the extended gold/copper uranium deposits but has decided not to develop this now because it has assessed the economic conditions of investing billions of dollars at this time is not good business. However, it is not all doom and gloom – far from it. The extent of the deposit has been mapped and it is still in the ground ready for extraction at some future date. The point being, it is vital to continue exploration programs so that when deposits reach the end of their life there are proven resources available to develop.

Figures 5–7 show how exploration expenditure for coal, gold, iron ore and petroleum has, in general, increased during the past 20 years, with gold the only commodity where expenditure has fallen. Figure 7, which combines all the mineral-related exploration expenditure, shows very clearly how even up to the

June quarter of 2012 the investment is still increasing. In fact, even after allowing for CPI increases, the level of investment is at a record level.

As we know, these increases cannot continue forever, but even if they fall by say 10% over current levels the resource industry should be in good shape.

Sources for the data

The data used to compile the charts were taken from the following sources:

CPI: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/6401.0>

Australian mineral and petroleum exploration expenditure: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyTopic/7008565B2DD42E23CA25718C00151590?OpenDocument>

World production of coal and oil: http://www.bp.com/assets/bp_internet/globalbp/globalbp_uk_english/reports_and_publications/statistical_energy_review_2011/STAGING/local_assets/pdf/statistical_review_of_world_energy_full_report_2012.pdf

World production of coal, iron ore and gold: <http://minerals.usgs.gov/minerals/pubs/myb.html>

Prices of commodities and Australian production statistics:

http://www.daff.gov.au/abares/publications_remote_content/publication_topics/minerals?sq_content_src=%2BdXJsPWh0dHA1M0EIMkYIMkYxNDMuMTg4LjE3LjIwJTJGYW5yZGwIMkZEQUZGU2VydmJjZSUyRmRpc3BsYXkucGhwJTNGZmlkJTNEcGVfYWJhemVzOTkwMDE3OTdfMTJhLnhtbCZhbGw9MQ%3D%3D and <http://www.bree.gov.au/publications/res.html>

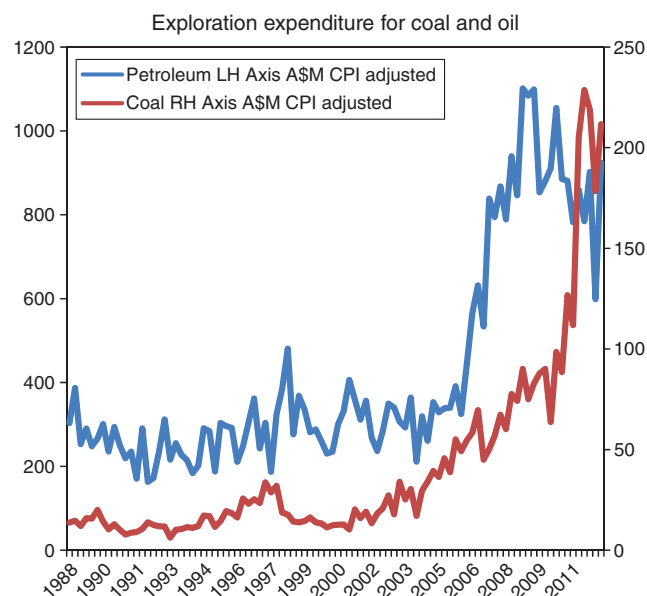


Fig. 6. Quarterly exploration investment for coal and petroleum in Australia 1988–2012. Adjusted to September 2012 A\$.

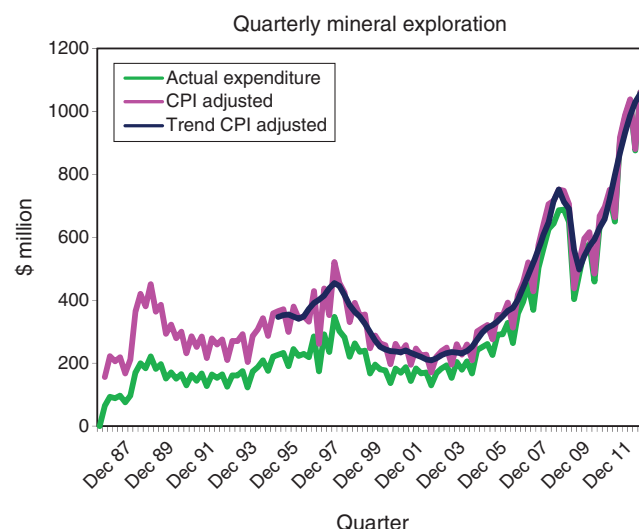


Fig. 7. Quarterly mineral exploration investment for Australia for 1986–2012. CPI adjusted data have been aligned with the September 2012 A\$.

WHEN EXPERIENCE COUNTS...



...COUNT ON FUGRO

Fugro Ground Geophysics have a worldwide operations network providing the complete suite of ground geophysical techniques, supported by some of the most experienced office and field personnel in the world.

- Electromagnetics (surface and borehole)
- GPS Gravity
- Induced Polarisation (2D and 3D)
- Magnetics
- MagnetoTellurics
- Nuclear Magnetic Resonance
- Radiometrics
- Seismic and GPR

Fugro Ground Geophysics

Tel: +61 8 9273 6400

Email: perthmail@fugroground.com.au

www.fugroground.com

